## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 21, 2018

**MEMORANDUM FOR:** Christopher J. Roscetti, Technical Director

**FROM:** J.W. Plaue and D. Gutowski, Resident Inspectors

**SUBJECT:** Los Alamos Activity Report for Week Ending September 21, 2018

**DNFSB Staff Activity:** Y. Li observed paleoseismic trenching activities and the expert panel review supporting the effort to update the seismic hazard analysis. B. Weathers was on site for resident inspector training for assignment at another DOE site.

Seismic Hazards Analysis: The ongoing paleoseismic trenching activities are intended to use the geological record to provide refined inputs to update to the site-wide probabilistic seismic hazards analysis. This analysis is used to ensure acceptable seismic performance of systems, structures, and components in the nuclear facilities. Preliminary results from the trenching interpretations, pending results of laboratory age dating, suggest reduced uncertainty on the number of Holocene era events, which is a key parameter in defining the seismic hazard. LANL personnel are currently developing a plan to complete the necessary analyses and peer reviews to issue a new probabilistic seismic hazards analysis in the 2023 timeframe.

**Plutonium Facility–Operations:** On Wednesday, workers performing maintenance on electrolytic decontamination equipment inadvertently knocked a fitting loose. This resulted in a spill of several gallons of electrolyte solution into the glovebox. The spill exceeded the criticality safety posting limit for liquid in an unsafe geometry so the workers stopped and called a potential process deviation. As this process is undergoing restart, there was no fissile material in the glovebox, only depleted uranium.

**Plutonium Facility–Work Planning:** Programmatic operations personnel conducted multiple sharps identification walk-downs across the facility. Of note, some first line managers have highlighted the sharps hazards posed by the cutting of wire cables that are widely used as tamper indicating devices. Recognition of this hazard appears to be primarily communicated through mentoring.

**Plutonium Facility–Nuclear Criticality Safety:** On Tuesday, operations personnel declared a potential process deviation after a document review revealed that a criticality safety posting was inconsistent with the associated evaluations. Fact-finding personnel took an action to strengthen the processes for the implementation verification and annual operations reviews that failed to identify this issue since 2015.

**Continuous Improvement:** On Monday, the LANL Deputy Director issued a Healthy Culture Platform Charter. The intent of this document is to unify disparate efforts focused on impacting a healthy culture.

**Contract Transition:** On Monday, LANS and Triad management held another all-hands meeting to update the workforce on the transition. An important development this week is the transmission of job offers to the workforce. The current LANL Director also provided a brief presentation emphasizing recent adverse events (see 9/7/2018 report). He noted the importance of remaining focused and procedure compliant during the transition period. The expected transition date remains November 1, 2018.